

Notice of Allowability

Application No.

10/637,662

Examiner

Thinh T. Nguyen

Applicant(s)

ASAO, YOSHIKI

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/25/2005.
2. ☒ The allowed claim(s) is/are 1,7,10,13,16,19,22 and 25-29.
3. ☒ The drawings filed on 8/11/2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


David Nelms
Supervisory Patent Examiner
Technology Center 2800

DETAILED ACTION

Examiner's Amendment.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

-- Cancel withdrawn non-elected claims 2-3,5-6,8-9,11-12,14-15,17-18,20-21,23-24. --

Reason for allowance

2. Claims 1,7,10,13,16,19,22,25-29 are allowed. The following is an examiner's statement of reason for allowance:

Group I: Claims 1,10,13,16,19,22.

Claims 1,10,13,16,19,22 are allowed because none of the references of record teaches or suggests the claimed **SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE** having the limitations:

-- “ a second column gate circuit that electrically connects the second bit line group to the data line group according to a second column selection signal different from the first column selection signal;

a plurality of word lines intersecting the plurality of bit lines included in the first and second bit line groups; and

a plurality of memory cells including magneto-resistive elements and adapted to be electrically connected to a plurality of bit lines included in the first and second bit line groups and selected by the plurality of word lines, spinning directions of the magneto-resistive elements being perpendicular to the plurality of bit lines included in the first and second bit line groups as seen on a plan view, wherein data is written to the plurality of memory cells by making a write electric current flow to the plurality of bit lines of the first or second bit line group, writing data being determined by a direction of the write electric current flowing to the plurality of bit lines of the first or second bit line group and the pitch of arrangement of the first bit line group and the second bit line group is greater than the pitch of arrangement of the bit lines included in the first and second bit line groups. “--

and all other limitations as recited in claim 1.

Group I: Claims 7,25-29.

Claims 7,25-29 are allowed because none of the references of record teaches or suggests the claimed **SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE** having the limitations:

-- “ a second column gate circuit that electrically connects the second bit line group to the data line group according to a second column selection signal different from the first column selection signal:

a plurality of word lines intersecting the plurality of bit lines included in the first and second bit line groups; and

a plurality of memory cells including magneto-resistive elements and adapted to be electrically connected to a plurality of bit lines included in the first and second bit line groups and selected by the plurality of word lines. Spinning directions of the magneto-resistive elements being perpendicular to the plurality of bit lines included in the first and second bit line groups as seen on a plan view, wherein data is written to the plurality of memory cells by making a write electric current flow to the plurality of bit lines of the first or second bit line group, writing data being determined by a direction of the write electric current flowing to the plurality of bit lines of the first or second bit line group and the pitch of arrangement of the magneto-resistive elements is greater between the first and second bit line groups than in the first and second bit line groups. “--

and all other limitations as recited in claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance”.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790. The examiner can normally be reached on Monday-Friday 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached at 571-272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9319 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval [PAIR] system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

<http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thinh T Nguyen 

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David Nelms
Supervisory Patent Examiner
Technology Center 2800